

ABSTRACT OF THE DISCLOSURE

**APPARATUS AND METHOD OF MAINTAINING TWO-BYTE IP
IDENTIFICATION FIELDS IN IP HEADERS**

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10 A method, system and apparatus for maintaining a two-
byte identification field of IP headers when a Gigabit
Ethernet is in use are provided. Since the identification
field is of two bytes, there is a limited number of
identification numbers that may be used. Due to the high
data transfer rate of the Gigabit Ethernet, this number may
be reached within one second. Hence, there may be a
possibility that two or more packets may have the same
15 identification number while in transit. In a representative
embodiment, one identification number is used for packets
that may not be fragmented. Thus, freeing the rest of the
numbers for the packets that may be fragmented.
Consequently, before the IP header is added to the packet, a
20 check is made to determine whether the packet may be
fragmented. If so, a unique identification number is used
in the identification field of the IP header. If not, a
non-unique number is used. The non-unique number is used
for all packets that may not be fragmented.